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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/708,270

02/20/2004

Mark Bilak

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04/10/2008

INTERNATIONAL BUSINESS MACHINES CORPORATION

DEPT. 18G

BLDG. 300-482

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HOPEWELL JUNCTION, NY 12533

EXAMINER

CONNOLLY, MARK A

ART UNIT

PAPER NUMBER

2115

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Advisory Action Before the Filing of an Appeal Brief</p>	<p>Application No. 10/708,270</p>	<p>Applicant(s) BILAK, MARK</p>	
	<p>Examiner MARK CONNOLLY</p>	<p>Art Unit 2115</p>	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 18 March 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 1-16 and 25.
Claim(s) withdrawn from consideration: 17-24.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____.
13. ☐ Other: _____.

/Mark Connolly/
Primary Examiner
Art Unit: 2115

Continuation of 11. does NOT place the application in condition for allowance because: In the REMARKS the applicants argue in substance that 1) Fujioka does not teach determining the difference between a minimum operating voltage uniquely determined for an IC and a predetermined nominal voltage selected for a family of ICs and therefore does not teach setting the operating voltage of an IC based in the difference and 2) Halepete does not teach voltage control information corresponding to a difference between a minimum operating voltage uniquely determined for the IC and a predetermined nominal voltage selected for a family of integrated circuits.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Fujioka teaches determining a minimum operating voltage uniquely determined for an IC [0007]. In summary, Fujioka suggests that a minimum voltage requirement amongst ICs can vary in accordance with a manufacturing process. Knowing this, Fujioka provides a means to test and determine a minimum voltage requirement for a particular IC within the system [abstract]. The newly determined minimum voltage is then stored for future reference if determined to be an effective minimum voltage. Furthermore, Fujioka teaches that in the event that the IC needs to be cooled, the system can reduce the voltage to the IC to the determined minimum voltage [0017]. It is interpreted the voltage being supplied to the IC before the reduction is a predetermined operating voltage for the family of ICs. That is the Fujioka system provides the predetermined voltage to the IC then when it is necessary to cool the IC down, the system then supplies the uniquely determined minimum voltage to the IC by providing control information to the DC-DC converter which controls the voltage supplied to the IC.

Although Fujioka teaches controlling the voltage supplied to the IC based on control information derived from the uniquely determined minimum voltage stored in memory, it is interpreted that the control information corresponds directly to the minimum operating voltage and not a DIFFERENCE between the minimum operating voltage and the predetermined voltage for the family of ICs. Halepete teaches that rather than decreasing the voltage directly in one step, the reduction can also be performed in a series of steps [col. 7 lines 33-35]. It was argued that it would have been obvious to one of ordinary skill in the art to try decreasing the voltage in a series of steps rather than in a single step because a person with ordinary skill has good reason to pursue the known options within his or her technical grasp.

It is obvious that in the Fujioka-Halepete system, when cooling the IC by reducing the voltage to the uniquely determined minimum voltage in a series of steps, those steps would correspond to the difference between the predetermined voltage for the family of ICs and the uniquely determined minimum voltage. This is because the voltage is being transitioned from the predetermined voltage to the uniquely determined minimum voltage in a series of steps and those individual steps represent voltages which fall in between the two voltages. The voltage range in between the two voltages corresponds to the difference of both voltages and therefore since the voltages applied in the series of steps obviously would fall within the voltage range, they also would correspond to the difference between the predetermined voltage for the family of ICs and the uniquely determined minimum voltage.

Regarding the amendments to claims 9 and 25, these are rejected on the same basis as set forth in the previous rejections of claims 9 and 25 set forth in the previous final office action and further in view of the arguments above for claim 1. As argued above, Fujioka does teach determining a unique minimum voltage requirement for a particular IC since minimum operating voltages amongst ICs can vary in accordance with a manufacturing process.

Claims 1-16 and 25 stand rejected over the prior art and therefore the application is not in condition for allowance..